REMARKS

Claims 1 and 3-61 remain pending in the application.

The Applicants respectfully request that the Examiner initial and return a copy of the IDS filed on February 3, 2009.

35 USC 101 Rejection of Claim 55

The Office Action rejected claim 55 under 35 USC 101 as allegedly being directed toward non-statutory subject matter, specifically alleging that "the system can be embodied in software".

Claim 55 is amended herein as suggested by the Examiner to overcome the rejection. The Applicants respectfully request the rejection of claim 55 be withdrawn.

Claims 1, 3-10, 15 and 17-61 over Gleeson in view of Dunlop and Schuster

In the Office Action, claims 1, 3-10, 15 and 17-61 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over U.S. Patent No. 5,446,736 to Gleeson et al. ("Gleeson") in view of U.S. Patent No. 6,721,872 to Dunlop et al. ("Dunlop"), and in further view of U.S. Patent No. 6,785,261 to Schuster et al. ("Schuster"). The Applicants respectfully traverse the rejection.

Claims 1, 3-10, 15 and 17-61 recite a **protocol gateway**, through which a message is communicated between a client application and a server application, to segment a message **communicated with an underlying wireless network protocol** into multiple segments. The segments are encapsulated the segments with a **segment header**.

The Examiner argued in the Response to Arguments section of the Office Action that "the protocol gateway and underlying wireless network protocol are both found in Gleeson, not Schuster." (see Office Action, page 18) Applicants' arguments are directed to what **function** the claimed protocol gateway is **performing**. The Applicants are not arguing that Gleeson fails to teach a protocol gateway, but that none of the cited references disclose, teach or suggest the claimed **protocol gateway**, i.e., a protocol gateway that performs a very specific function. As discussed below, the cited references fail to disclose,

teach or suggest a **protocol gateway**, through which a message is communicated between a client application and a server application, to segment a message **communicated with an underlying wireless network protocol** into multiple segments, and encapsulate the segments with a **segment header**, as claimed.

The Examiner argued in the Response to Arguments section of the Office Action that the Examiner's motivation, i.e., "message segmentation allows for packets, which are smaller than the message as a whole, to be sent; which would reduce transfer errors in comparison to sending the whole message at once, thus transmission latency would be minimized overall with this technique." (see Office Action, page 18)

Conventionally, message segmentation is performed at the beginning of a message's path within a digital communication network for the reasons explained by the Examiner, as taught by Schuster. Thus, the motivation that the Examiner provides applies to why digital messages are conventionally segmented. However, the Examiner has still failed to provide motivation why one skilled in the art would take Schuster's teaching of message segmentation at the beginning of a message's path within a digital communication network and modify Gleeson's alleged protocol gateway with such a feature. Gleeson's invention relies on LANs and WANs, that conventionally rely on message segmentation at the beginning of a message's path within the LANs and WANs. Thus, Gleeson, Dunlop, and Schuster, fail to disclose, teach or suggest message segmentation being performed by a **protocol gateway**, much less the specific message segmentation, as claimed.

The Examiner alleged that Dunlop teaches use of a reconfigurable network interface architecture including a device to support/encapsulate multiple network operating protocols and an OSI protocol stack" at col. 3, lines 14-34 and col. 4, lines 5-15. (see Office Action, page 4)

Dunlop at col. 3, lines 14-34 and col. 4, lines 5-15 teaches:

> FIG. 1 is a representation of a reconfigurable network interface architecture 10 according to the invention. Basically, the architecture 10 combines a programmable hardware (HW) device in the form of, for example, a programmable logic device (PLD) such as a field

> programmable gate array (FPGA) 12, and a programmable software (SW) device in the form of a processor 14; to support multiple network operating protocols between a chosen network 16 and a host device 18. The host device may be any kind of host including but not limited to a personal laptop, desktop or hand-held computer, a network appliance, file server, printer, vending machine, cell phone or the like. An example of currently popular hand-held computers in which the architecture 10 can be embodied are so-called personal digital assistants (PDAs) such as "Palm Pilot" devices. The host device may also be a server or other node at a central site or base station of a given network. A typical device for the FPGA 12 may be Xilinx type "4044 XLA". A typical device for the processor 14 may be Strong ARM type "SA1100".
>
> Thus, using the architecture 10 of FIG. 1, the NIC 20 is capable of implementing digital parts of layer 1 of the known seven-layer OSI network model, as well as layer 2 and higher layers of the protocol stack. The reconfiguration module 26 of the processor is arranged to respond to data or other information identifying a desired network protocol implementation for the NIC 20, by signaling the configuration memory 24 and the program memory 33 to load corresponding program data into the FPGA 12 and the processor 14.

Dunlop teaches a programmable NIC that supports multiple protocols. Dunlops NIC fails to segment a message that already is communicated with a **protocol**, much less a **wireless protocol**, i.e., an **underlying wireless network protocol**, much less add a segment header to that segmented message, as claimed.

The Examiner relies on Schuster to allegedly disclose "a method and apparatus for facilitating correction of data loss in a data transmission system (see abstract). Schuster teaches a message divided into data packets and those packets including a packet header (col. 1 line 63-col. 2, line 7)." (see Office Action, page 4)

Schuster at col. 1, lines 63-col. 2, line 7 describes how packet switched packets are formed of multiple segments, and that they include a header. This is simply networking at its most basic level that lacks any relevance to the specific claimed element that performs encapsulation, i.e., a **protocol gateway**, and the specific item being encapsulated, i.e., a message communicated with an **underlying wireless network protocol**. Schuster fails to disclose a **protocol gateway**, much less through which a message is communicated between a client application and a server application, to segment

a message **communicated with an underlying wireless network protocol** into multiple segments, and encapsulate the segments with a **segment header**, as recited by claims 1, 3-10, 15 and 17-61.

Thus, even if Schuster discloses what the Examiner alleged, Gleeson, Dunlop and Schuster, either alone or in combination, fail to disclose, teach or suggest a **protocol gateway**, through which a message is communicated between a client application and a server application, to segment a message **communicated with an underlying wireless network protocol** into multiple segments, and encapsulate the segments with a **segment header**, as recited by claims 1, 3-10, 15 and 17-61.

Moreover, the Examiner proposed to modify Gleeson with Schuster's packets from a packet switch network. (see Office Action, page 4) However, Gleeson already discloses use of LANs and WANs that are packetized networks. (see col. 1, lines 13-50). Thus, modifying Gleeson with Schuster's packets from a packet switched network is redundant, unnecessary and a moot point.

Moreover, the Examiner motivation for modifying Gleeson with Schuster's message segmentation into multiple segments and a segment header is to minimize transmission latency. (see Office Action, page 5) However, segmenting a message into multiple segments and adding a segment header would tend to increase latency – **not** minimize latency, as alleged. Segmenting a message and adding a segment header to the multiple segments increases the amount of information that must pass over a network, stressing a network's bandwidth capability and resulting in packets arriving at their destination with greater latency. Moreover, multiple segments must be re-assembled at their destination that further increases latency during collection of data packets, possible re-transmission of lost packets, and reassembly of the packets. All of these operations increase latency. Thus, the Examiner's motivation would have the **opposite result** of what the Examiner relies on as motivation to modify Gleeson.

The Examiner alleged that a transmission error has a greater impact on a whole message than a segmented message, with such a

transmission error increasing latency for whole messages. (see Response to Arguments section of the Office Action, page 18) The Examiner's statement may be true, but the vast majority of data messages within digital communication networks are communicated using packets. As discussed above, modifying Gleeson's system to include message segmentation is redundant since LANs and WANs are packetized networks that already rely on message segmentation at the beginning of a message's path within the digital communication networks.

Accordingly, for at least all the above reasons, claims 1, 3-10, 15 and 17-61 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Claims 11-14 and 16 over Gleeson in view of Dunlop, Schuster, and Meyer

In the Office Action, claims 11-14 and 16 are rejected under 35 U.S.C. §103(a) as allegedly being obvious over Gleeson in view of Dunlop and Schuster, and in further view of U.S. Patent No. 6,778,099 to Meyer et al. ("Meyer"). The Applicants respectfully traverse the rejection.

Claims 11-14 and 16 recite a **protocol gateway**, through which a message is communicated between a client application and a server application, to segment a message **communicated with an underlying wireless network protocol** into multiple segments, and encapsulate the segments with a **segment header**. As discussed above, Gleeson, Schuster and Dunlop, either alone or in combination, fail to disclose, teach or suggest such features.

The Examiner relies on Meyer to allegedly make up for the deficiencies in Gleeson, Schuster and Dunlop to arrive at the claimed features. In particular, the Examiner relies on Meyer to allegedly disclose a data link layer and a physical layer that are together adapted to comply with an RIM protocol, an ARDIS protocol, a GPRS protocol, and a GSM protocol. (see Office Action, pages 15, 16 and 17) However, a thorough reading of Meyer reveals that he also fails to disclose a **protocol gateway**, much less through which a message is communicated between a client application and a server application, to segment a message communicated with an underlying wireless network protocol into

multiple segments, and encapsulate the segments with a **segment header**, as recited by claims 11-14 and 16.

Gleeson, Dunlop, Schuster and Meyer, either alone or in combination, fail to disclose, teach or suggest a protocol gateway, through which a message is communicated between a client application and a server application, to segment a message communicated with an underlying wireless network protocol into multiple segments, and encapsulate the segments with a **segment header**, as recited by claims 11-14 and 16.

Accordingly, for at least all the above reasons, claims 11-14 and 16 are patentable over the prior art of record. It is therefore respectfully requested that the rejection be withdrawn.

Conclusion

All objections and rejections having been addressed, it is respectfully submitted that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited.

Respectfully submitted,

(#46,504) for

William H. Bollman
Reg. No. 36,457

Manelli Denison & Selter PLLC
2000 M Street, NW Suite 700
Washington, DC 20036-3307
TEL. (202) 261-1020
FAX. (202) 887-0336
WHB/df